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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,035	12/11/2003	Xiaolan Ai	TIMK 8545US (U1)	8434

1688 7590 04/29/2005

POLSTER, LIEDER, WOODRUFF & LUCCHESI  
12412 POWERSCOURT DRIVE SUITE 200  
ST. LOUIS, MO 63131-3615

EXAMINER

PANG, ROGER L

ART UNIT	PAPER NUMBER
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3681

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/733,035

Applicant(s)

AI ET AL.

Examiner

Roger L Pang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-11 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 12 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12-03, 7-04</u> . | 6) <input type="checkbox"/> Other: ____.  |

### **DETAILED ACTION**

The following action is in response to application 10/733,035 filed on December 11, 2003.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 6 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to claims 2 and 12, these claims define a certain equation that the parts have to adhere to, but the variables are not disclosed, nor are the constants (if there are any). Therefore, the only limitations present appear to be the random equation, which is indefinite. With regard to claim 6, the first and fourth bores are already introduced in claim 5, and should therefor reference the previously claimed limitations with "the" or "said."

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, and 3-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Tanaka.

With regard to claim 1, Tanaka teaches an integrated motor and traction drive comprising: a

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motor 3 supplying power at a high angular velocity, the motor comprising a stator (Col. 4); a rotor 3b which revolves in the stator at a high angular velocity, an a sun roller 3c affixed to the rotor having a first raceway; and a traction drive for receiving power at a high angular velocity and delivering a power at a lesser angular velocity, the traction drive comprising a carrier 12, an outer ring member 18 having a fourth raceway eccentric to the firs raceway of the sun roller and an output shaft 19 for delivering power at a lesser angular velocity, and a loading planetary roller 16 supported by the carrier having a third raceway that engages with the first raceway of the sun roller and the fourth raceway of the outer ring forming a converged wedge for transferring power between the sun roller and the outer ring. With regard to claim 3, Tanaka teaches the drive, further comprising a supporting planetary roller 15 supported by the carrier having a second raceway that engages with the first raceway and fourth raceway to self-balance internal forces. With regard to claim 4, Tanaka teaches the drive, wherein the supporting planetary roller comprises a pin shaft 13 supported by the carrier and a bearing 13a affixed to the pin shaft. With regard to claim 5, Tanaka teaches the drive, further comprising a housing 2 affixed to the stator and the carrier having a first bore (in 2b) for supporting the sun roller and a fourth bore for supporting outer ring (in 2a). With regard to claim 6, Tanaka teaches the drive, wherein the housing comprises: a motor housing attached to the carrier and affixed to the stator (Fig. 1), a motor cover 2b attached to the motor housing having said first bore for supporting the sun roller, a bearing cup plate 11 attached to the motor cover to secure the sun roller; and a traction drive housing 2a attached to the carrier (via 11) having said fourth bore for supporting the outer ring.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka as applied to claim 1 above, and further in view of Cope. Tanaka teaches the drive, wherein the loading planetary roller comprises: a support bearing 13a and pin shaft 13, but lacks the teaching of races and an elastic insert. Cope teaches a drive with a pin shaft 46 engaged with a center hole of an elastic insert 61a, the outer surface of the insert engages an inner race 58, and an outer race 54 engages a roller 40. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tanaka to employ the elastic insert and race bearing in the place of the needle bearing in order to reduce vibration in the system (Abstract).

***Allowable Subject Matter***

Claims 9-11 are allowed.

Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wikander has been cited to show islands on the carrier.

Kempken and Watanabe have been cited to show similar motor and motor housings.

Ai has been cited to show a similar transmission.

### **FACSIMILE TRANSMISSION**

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is (703) 305-3597. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

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Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (703) 305-3597) on \_\_\_\_\_ (Date)

Typed or printed name of person signing this certificate:

\_\_\_\_\_  
\_\_\_\_\_

(Signature)


If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roger L Pang whose telephone number is 571-272-7096. The examiner can normally be reached on 5:30am to 4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Roger L Pang  
Primary Examiner  
Art Unit 3681

April 28, 2005